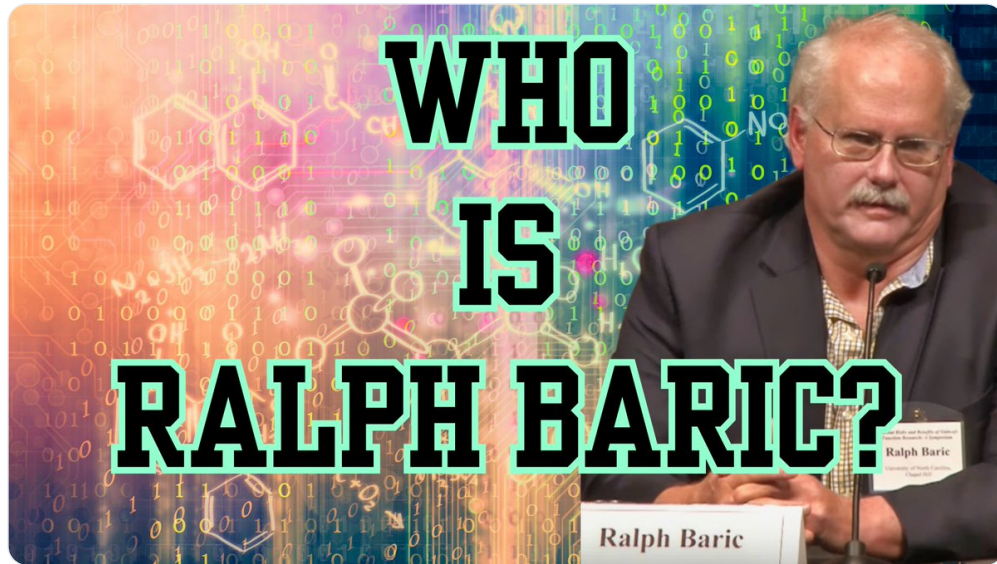





Destiny Rezendes @dezzie_rezzie

Oct 25, 2023 · 13 tweets · [dezzie_rezzie/status/1716984766342279480](https://twitter.com/dezzie_rezzie/status/1716984766342279480)



1🔍 Who is Ralph Baric, really? We all know that he's the world's expert on coronaviruses & he is implicated in the lab leak 'theory' that resulted in the C19 pandemic, but do you REALLY know Baric & how important his role in C19 is?



2📖 In previous threads I have extensively looked into the career of Ralph Baric. Along the way I discovered that Baric's wife, Antoinette 'Toni' also works at UNC Chapel Hill as the school's Grant Specialist. Convenient.



Toni Baric
 Business Officer at University of North Carolina
 Chapel Hill, North Carolina, United States · [Contact info](#)
 157 connections

 UNC Chapel Hill
 Cal Poly Pomona

[Connect](#)
[Message](#)
[More](#)

Activity
 159 followers

Toni Baric commented on a post • 2mo


I am sorry to hear Stefan.

Toni Baric commented on a post • 4mo

Can wait until my issue comes in. Congratulations!

[Show all comments →](#)

Experience


Grants Specialist
 UNC Chapel Hill
 2007 - Present · 16 yrs 10 mos

3 📖 When looking into this months ago I noticed Baric's CV listed his family member, which confirmed Antoinette Baric was indeed Ralph's wife. Also listed were two daughters [Cristina & Michelle], & two son's [Michael & Thomas]

Curriculum Vitae
Ralph S. Baric

I. PERSONAL INFORMATION:

A. Business Address: Department of Epidemiology School of Public Health University of North Carolina at Chapel Hill McGaveran-Greenberg Hall, CB# 7435 Chapel Hill, North Carolina 27599-7435 Phone: 919-966-3895	Home Address: 2600 Northstream Ct Haw River, NC 27258 336-578-1575
B. Personal Data Born: April 3, 1954 US Citizen	Married: Antoinette Baric Children: Cristina, Michelle, Michael, Thomas

II. EDUCATION:

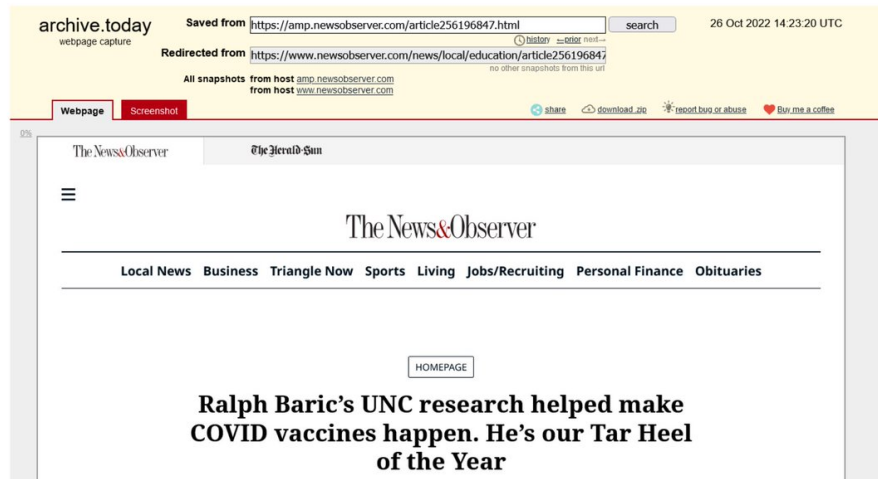
- North Carolina State University, Raleigh, North Carolina, B.S., Zoology, 1977
- North Carolina State University, Raleigh, North Carolina, Ph.D., Microbiology, 1983
- University of Southern California, School of Medicine, Department of Microbiology and Neurology, Post-doctoral Fellow, 1982-1986

III. PROFESSIONAL EXPERIENCE:

- Assistant Professor, Department of Parasitology and Laboratory Practice, University of North Carolina at Chapel Hill, March 1986-June 1990
- Assistant Professor, Department of Epidemiology, University of North Carolina at Chapel Hill, July 1990-June 1993.
- Associate Professor, Department of Epidemiology, University of North Carolina at Chapel Hill, July 1993-2001.
- Associate Professor, Department of Microbiology and Immunology, University of North Carolina at Chapel Hill, July 1993-2001
- Professor, Department of Epidemiology, Department of Microbiology and Immunology, University of North Carolina at Chapel Hill, July 2001-current

4 📖 In December of 2021, the NC regional Pulitzer-prize winning newspaper wrote a glowing article about Ralph Baric, announcing that he had just been given the highest civilian honor in the state by the governor. The article mentioned almost all aspects of Baric's life-almost..

Link: <https://archive.ph/DQreQ>



For his contributions to the development of the Moderna vaccine as well as [Remdesivir](#) and [Molnupiravir](#), which are COVID-19 drug treatments, Baric is The News & Observer's 2021 Tar Heel of the Year. The distinction honors North Carolina residents who have made significant contributions to the state and region — and in this case, the world.

Dr. Ralph Baric, a scientist at UNC-Chapel Hill's Gillings School of Global Public Health, has studied coronaviruses for decades. Baric and researchers in his lab helped develop the Moderna vaccine and treatments for COVID-19 like Remdesivir. BY JULIA WALL

A COMMITMENT TO THE PROCESS

Baric's research was the basis for multiple vaccines, including Moderna, which was tested on animal models in his UNC-CH lab before it was given to people. His team also conducted the pre-clinical development for the only approved direct-acting antiviral drug, [Remdesivir, to treat COVID-19 patients](#) in hospitals. Baric's lab also studied [Molnupiravir, which is the first antiviral pill](#) shown to treat COVID-19 and was authorized for emergency use last month.

Link: <https://archive.ph/DQreQ>

'HIS POP POP FIGHTS THE CORONAVIRUS'

Cristina Layne, Baric's daughter, appreciated the personal guidance from one of the world's leading experts as she navigated the uncertainty of the pandemic with her toddlers. The laughter Baric brought to their home while running around, rolling on the floor and letting his grandkids beat up on him for hours was just as important.

Layne's 4-year-old son also loved watching Baric on the news, and he knows that his Pop Pop fights the coronavirus. He likes to pretend he can be a superhero, too, saying he'll fight it with a microscope.

"I think it's impressive to have the weight of the world on your shoulders and ... he can let loose and relax for a few moments to give himself some peace and reduce any anxiety that he might be feeling," Layne said.

Michael Baric, Baric's son, is a swim coach at UNC-CH who faced the difficulties of trying to carefully operate an athletic program and team during the pandemic.

Once vaccines were on the horizon, the level of hope rose in the athletic department — not because the pandemic was almost over, but because there was something to look forward to, he said.

Link: <https://archive.ph/DQreQ>

"It made me very proud, because I know he played a huge role in that," Michael Baric said.

For Toni, her husband brought a sense of relief during the pandemic and pride as she collected messages of gratitude from others.

One email came from a UNC-CH faculty member whose sister recovered from COVID-19 after being treated with Remdesivir. Another email was sent by a mom who thanked Baric for saving her son's life.

"The state and the country and the world are really lucky that Ralph did that, starting decades ago," said Johnston, a professor emeritus of microbiology and immunology at the UNC School of Medicine and the executive director of the nonprofit organization Global Vaccines Inc.

Link: <https://archive.ph/DQreQ>

5 📖 The article mentions his wife, Toni, their long history at UNC, their son, Michael who also works at UNC as a swim coach, their daughter, Cristina & even Baric's grandkids. No mention tho of Michelle & Thomas Baric. The other children...

In 2015, Baric and his colleagues at UNC-CH started working on Remdesivir, without knowing that in a few years it would be saving lives of patients at the hospital across the street and at those around the country. More than half of patients hospitalized with COVID-19 are given Remdesivir, according to [biopharmaceutical company Gilead Sciences](#).

About two to three years before the COVID-19 pandemic, Baric and his colleagues started testing mRNA-based vaccines against other coronaviruses. The mRNA vaccines essentially teach cells how to make a protein that triggers an immune response that attacks the virus. Scientists like Baric have been pioneering that technology since the 1990s.

Their data was “spectacular” in animal models of human disease in how it could neutralize the virus through immune responses and protect young and old animals from lethal disease, Baric said. That data was rolling out just as SARS CoV-2 emerged, so Baric and other scientists used it as the foundation to develop vaccines to fight COVID-19.

Link: <https://archive.ph/DQreQ>

In collaboration with the NIH, Baric's lab was charged with developing similar animal models to test vaccine candidates by April 2020 and gather data by the end of June 2020, so it could be sent to the FDA to get approval for Phase 3 testing in humans, which began in August 2020.

“That trusting relationship and their expertise in animal model development allowed for early understanding of how efficacious COVID-19 vaccines were and undoubtedly led to the record speed of development,” Corbett said.

She is an [assistant professor of immunology and infectious diseases at Harvard University](#) who worked with Baric while earning her doctorate at UNC-CH. Corbett helped develop the Moderna vaccine as a research fellow at the National Institute of Allergy and Infectious Diseases' Vaccine Research Center.

Graham, former deputy director of the NIAID Research Center at NIH, called Baric “the premier coronavirologist in the world.”

Link: <https://archive.ph/DQreQ>

PREPARING FOR THE NEXT OUTBREAK

While Baric and his team have hit remarkable milestones throughout the pandemic, the celebratory moments have been fleeting.

The day before a U.S. Food and Drug Administration panel gave preliminary approval to [Molnupiravir](#) in November, the [omicron variant emerged](#). Baric's lab geared up to respond to that variant to understand its biology, its impact on therapeutics, vaccines and drugs, and how best to counter it if some of the products that are on a shelf lose their potency, Baric explained.

Accomplishments: Inducted into the National Academy of Sciences in 2021; UNC System [O. Max Gardner Award](#) in 2021; North Carolina Award in 2020.

Fun fact: Before the pandemic, Baric and his wife would eat lunch together nearly every day at UNC-Chapel Hill. Sometimes they would invite their son, Michael, who also works at UNC.

Link: <https://archive.ph/DQreQ>

6 🏠 I found this very odd. Not only was Thomas Baric missing from the article, but also from Baric's CV. It took some digging but lo' & behold, Thomas Baric ALSO works at UNC, in fact he's on his way to follow his dad's footsteps; working on viruses/vaccines!

EurekAlert! | AAAS

SEARCH ARCHIVE

ADVANCED SEARCH

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NEWS RELEASE 25-JUN-2021

Scientists discover how dengue vaccine fails to protect against disease

UNC-Chapel Hill scientists identified the small subpopulation of antibodies in vaccinated children that correlate with protection against dengue fever. This research should help shape better vaccines

Peer-Reviewed Publication
UNIVERSITY OF NORTH CAROLINA HEALTH CARE

Media Contact
mark Derewicz
University of North Carolina Health Care
mark.derewicz@unc.edu
Office: 919-966-9037

More on this News Release

Scientists discover how dengue vaccine fails to protect against disease
UNIVERSITY OF NORTH CAROLINA HEALTH

"Our results suggest that a safe and effective dengue virus vaccine needs to stimulate neutralizing antibodies targeting unique sites on each of the four dengue serotypes," Adams said. "Not merely the neutralizing antibodies against cross-reactive epitopes common to all four dengue types."

Link: <https://www.eurekalert.org/news-releases/903503>

ADVERTISEMENT

ASM Journals / mBio / Vol. 10, No. 5
/ Role of Zika Virus Envelope Protein Domain III as a Target of Human Neutralizing Antibodies

Observation | 17 September 2019



Role of Zika Virus Envelope Protein Domain III as a Target of Human Neutralizing Antibodies

Authors: Emily N. Gallichotte, Ellen F. Young, Thomas J. Baric, Boyd L. Yount, Stefan W. Metz, Matthew C. Begley, Aravinda M. de Silva, Ralph S. Baric | [AUTHORS INFO & AFFILIATIONS](#)


DOI: <https://doi.org/10.1128/mbio.01485-19> | [Check for updates](#)

20 / 4,574



Link: <https://journals.asm.org/doi/10.1128/mbio.01485-19>

MUCK RACK
For PR Pros - For Journalists


Thomas J. Baric
 As seen in: [Cell Press](#)

ARTICLES

Role of Zika Virus Envelope Protein Domain III as a Target of Human Neutralizing Antibodies
 4 YEARS AGO | By Emily N. Gallichotte, Ellen Young, Thomas J. Baric | [asm.org](#)
 Observation | Host-Microbe Biology Emily N. Gallichotte, Ellen F. Young, Thomas J. Baric, Boyd L. Yount, Stefan W. Metz, Matthew C. Begley, Aravinda M. de Silva, Ralph S. Baric, J. S. Malik Peiris, Editor DOI: 10.1128/mbio.01485-19
 ABSTRACTZika virus (ZIKV) is a flavivirus that is structurally highly similar to the related viruses, dengue virus (DENV), West Nile virus, and yellow fever virus.
[Open in Who Shared](#) | [Wrong byline?](#)

Genetic Variation between Dengue Virus Type 4 Strains Impacts Human Antibody Binding and Neutralization
 5 YEARS AGO | By Emily N. Gallichotte, Thomas J. Baric, Usha Nivarthi, Matthew J. Delacruz | [Cell Press](#)
 There is amino acid variability within the envelope protein across DENV4 genotypesThere are four distinct DENV serotypes, and within DENV4, there are five distinct genotypes. The impact of genotypic diversity is not known, nor is it clear whether infection with one DENV4 genotype results in protective immunity against the other genotypes. To measure the impact of DENV4 genetic diversity, we generated an isogenic panel of viruses containing the envelope protein from the different genotypes.
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[SEE ALL 2 ARTICLES](#)

Link: <https://muckrack.com/thomas-j-baric>

The screenshot shows the NIH RePORTER interface. At the top, there's a navigation bar with 'NIH RePORT RePORTER', 'FAQs', 'API', 'ExPORTER', and a 'Sign In' button. Below this is a 'Search Results > Project Details' header. The main content area is titled 'PRECLINICAL ASSAYS TO PREDICT TETRAVALENT DENGUE VACCINE EFFICACY'. It includes a sidebar with links like 'Description', 'Details', 'Sub-Projects', 'Publications', 'Patents', 'Outcomes', 'Clinical Studies', 'News and More', 'History', and 'Similar Projects'. The 'Description' tab is active, showing an 'Abstract Text' section. The abstract text discusses dengue virus, vaccine development, and the efficacy of a tetra-valent vaccine candidate. At the bottom of the abstract, it mentions 'We have discovered new quaternary structure Ab epitopes linked to'.

Link: <https://reporter.nih.gov/search/0vwNTqyltkC2pzco-LNSA/project-details/9153244>

7 📖 Thomas Baric is listed as a scientist and co-author of multiple papers with his father Ralph working on the same studies that Ralph had been working on leading up to the pandemic including federally funded work. However, you don't find him if you search UNC's website. 🤔

The screenshot shows the UNC School of Medicine website. At the top, there's a navigation bar with 'UNC SCHOOL OF MEDICINE', 'UNC Chapel Hill', 'UNC Search', 'Intranet', and 'Login'. Below this is a search bar with 'Thomas Baric' entered. The search results show 'Search Results for "Thomas Baric"'. There are no results found. At the bottom, there's a footer with 'UNC SCHOOL OF MEDICINE', 'Find', 'About', 'Connect', and 'Partner Sites'.

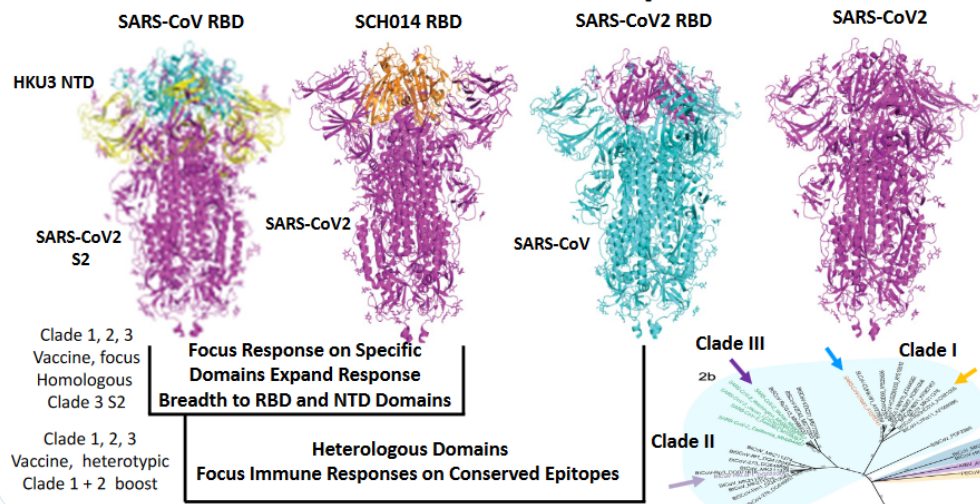
Link: https://www.med.unc.edu/?s=%22Thomas+Baric%22&cx=017059784719810698204%3A1j2ibo0i4wo&cof=FORID%3A106ie=UTF-8&searchbtn=Search&search_type=gcs#gsc.tab=0&gsc.q=%22Thomas%20Baric%22&gsc.page=1

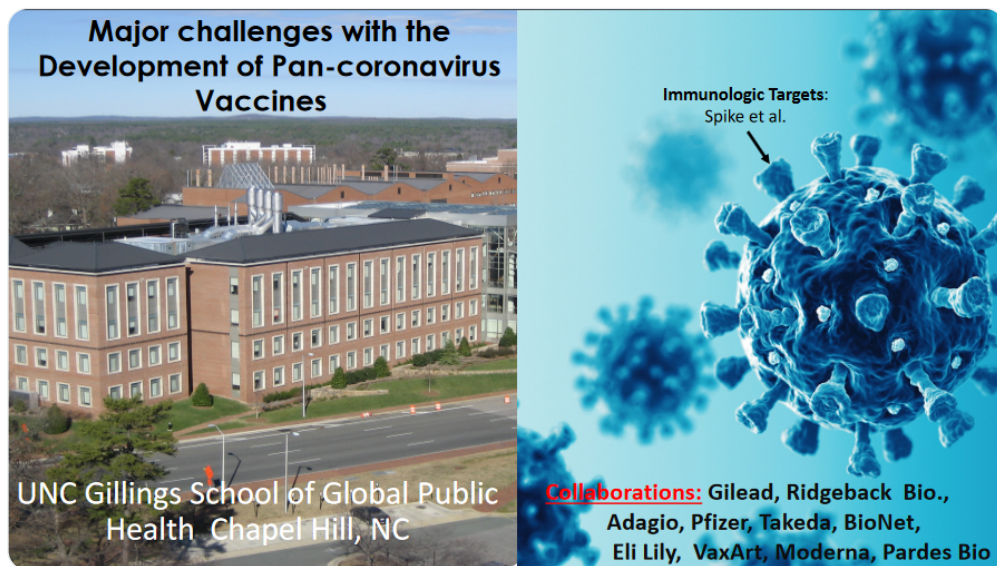
8 📖 I only found out due to a March 2022 WHO consultation document by UNC Chapel Hill titled, Major challenges w/the development of Pan-Coronavirus Vaccines, where on the last page is listed "Tommy Baric" & Acknowledged is Pfizer, Merck, Zuckerberg, & NIAID.

Common Obstacles

- **Sarbecoviruses**
 - Group II and Group III strains and assays
 - More High Risk Strains
- **Other Betacoronaviruses-**
 - MERS-CoV (group 2c)
 - heterologous group 2c high-risk strains/models
 - Group 2d strains (to be identified and developed)
 - Group 2a (HCoV OC43/HKU1)
 - limited reagents/animal models
 - lots of animal strains (surrogates)
- **Other Alphacoronaviruses**
 - NL63 and HCoV229E animal models (weak/nonexistent)
 - High Priority Zoonotic Strains (to be identified and developed)
 - Several animal strains/models available
- **Deltacoronaviruses**
 - Porcine epidemic diarrhea virus
 - Other high priority strains (to be identified and developed)

Chimeric Sarbecovirus Spike Vaccines





Baric Laboratory

David Martinez
Rachel Graham

Lisa Gralinski
Lisa Lindesmith
Ande West
Ethan Fritch
Alexandra Schaefer
Trevor Scobey
Tommy Baric
Lilly Adams

Victor Tse Deana Zhu
Sarah Leist
Jessica Swanstrom
Paul Brewer-Jensen
Boyd Yount
Ellen Young
Caitlin Edwards
Jenny Munt
Kenny Dinnon
John Powers
Fernando Moreira
Rita Maganck

UNC Epidemiology
Gralinski Lab
Sheahan Lab

Vanderbilt University
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Scott Randell

UNC School of Medicine
Dr. William Fischer
Dr. Mark Heise

RIDGEBACKBIO

ADC **Adimab** **Lilly**

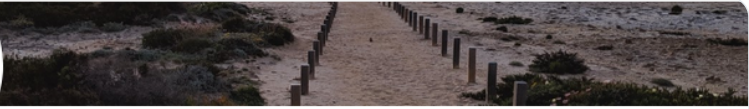
Takeda **Pfizer**

National Institute of Allergy and Infectious Diseases

Chan Zuckerberg Initiative **MERCK**

9. 📖 Seems like Thomas wasn't forgotten from the article of his father's success. He was intentionally not mentioned. The big question is why? But the curiosity doesn't end there. Why nothing more than a mention of Michelle Baric?

10. 📖 Maybe it has something to do with the fact that Michelle works at Myriad Genetics [MG] Why is this relevant. Baric wasn't alone in his honors by the state of NC, another recipient was NIH director Francis Collins, another NC native.



Michelle Baric

Genetic Counselor at Myriad Genetics

Wrightsville Beach, North Carolina, United States · [Contact info](#)

185 connections



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Message

More



Myriad Genetics



University of Cincinnati

Activity

184 followers

Michelle hasn't posted yet

Recent posts Michelle shares will be displayed here.

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Experience



Genetic Counselor

Myriad Genetics · Full-time

Aug 2020 - Present · 3 yrs 3 mos

Patient Education Team



Genetic Counselor

Duke University Health System · Full-time

Nov 2015 - Jul 2020 · 4 yrs 9 mos

Durham, NC

文 31 languages

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For other people named Francis Collins, see [Francis Collins \(disambiguation\)](#).

Before being appointed director of the NIH, Collins led the Human Genome Project and other genomics research initiatives as director of the [National Human Genome Research Institute](#) (NHGRI), one of the 27 institutes and centers at NIH. Before joining NHGRI, he earned a reputation as a gene hunter at the [University of Michigan](#).^[3] He has been elected to the [Institute of Medicine](#) and the [National Academy of Sciences](#), and has received the [Presidential Medal of Freedom](#) and the [National Medal of Science](#).

On October 5, 2021, Collins announced that he would resign as NIH director by the end of the year.^[6] Four months later in February 2022, he joined the [Cabinet of Joe Biden](#) as Acting [Science Advisor to the President](#), replacing [Eric Lander](#).^{[7][8]}

Collins was born in [Staunton, Virginia](#), the youngest of four sons of Fletcher Collins and Margaret James Collins. Raised on a small farm in Virginia's [Shenandoah Valley](#), Collins was [home schooled](#) until the sixth grade.^[9] He attended [Robert E. Lee High School](#) in Staunton.



Francis Collins

Science Advisor to the President

Acting

In office

February 18, 2022 – October 3, 2022

President Joe Biden

Preceded by [Eric Lander](#)

Succeeded by [Arati Prabhakar](#)

16th Director of the National Institutes of Health

In office

August 17, 2009 – December 19, 2021

President	Barack Obama Donald Trump Joe Biden
-----------	---

Nonutv Lawrence A. Tak



Dr. Kizzmekia Corbett speaks to members of the graduating class and parents at the University of North Carolina commencement exercises Friday, May 14, 2021. BY UNC

A group of nine North Carolinians spanning the fields of microbiology and immunology, education, public service, history and fashion received the state's highest civilian honor during a ceremony Thursday evening.

Recipients of the North Carolina Award for 2021 and 2020 (since last year's ceremony was canceled due to the pandemic) include [Dr. Francis Collins](#), the outgoing director of the National Institutes of Health who has led the federal agency for the last 12 years; Dr. Ralph Baric, a renowned coronavirus researcher at UNC-Chapel Hill; and André Leon Talley, who grew up in Durham and went on to work at several fashion publications, including Vogue.

Established by state lawmakers in 1961 and first awarded in 1964, the North Carolina Award recognizes "significant contributions to the state and nation in the fields of fine arts, literature, public service and science," according to the [N.C. Department of Cultural and Natural Resources](#), which administers the award.

More than 250 people have received the award, including Maya Angelou, James Taylor, John Hope Franklin, the Rev. Billy Graham and the Rev. William I. Barber II.

NORTH CAROLINA

Meet the 9 North Carolinians receiving the state's highest civilian honor this year

BY AVI BAJPAI

UPDATED NOVEMBER 19, 2021 10:45 AM



11 📰 Here's the kicker, Collins wasn't just Fauci's boss at NIH, he also was the first director of the Human Genome Project at the Nat'l human genome Institute, of which the company leading the sequencing is none other than Myriad Genetics.

Developments [\[edit \]](#)

With the sequence in hand, the next step was to identify the genetic variants that increase the risk for common diseases like cancer and diabetes.^{[23][63]}

It is anticipated that detailed knowledge of the human genome will provide new avenues for advances in [medicine](#) and [biotechnology](#). Clear practical results of the project emerged even before the work was finished. For example, a number of companies, such as [Myriad Genetics](#), started offering easy ways to administer genetic tests that can show predisposition to a variety of illnesses, including [breast cancer](#), [hemostasis disorders](#), [cystic fibrosis](#), [liver](#) diseases and many others. Also, the [etiologies](#) for [cancers](#), [Alzheimer's disease](#) and other areas of clinical interest are considered likely to benefit from genome information and possibly may lead in the long term to significant advances in their management.^{[77][78]}

There are also many tangible benefits for biologists. For example, a researcher investigating a certain form of [cancer](#) may have narrowed down their search to a particular gene. By visiting the human genome database on the [World Wide Web](#), this researcher can examine what other scientists have written about this gene, including (potentially) the three-dimensional structure of its product, its functions, its evolutionary relationships to other human genes, or to genes in mice, yeast, or fruit flies, possible detrimental mutations, interactions with other genes, body tissues in which this gene is activated, and diseases associated with this gene or other datatypes. Further, a deeper understanding of the disease processes at the level of molecular biology may determine new therapeutic procedures. Given the established importance of DNA in molecular biology and its central role in determining the fundamental operation of [cellular processes](#), it is likely that expanded knowledge in this area will facilitate medical advances in numerous areas of clinical interest that may not have been possible without them.^[79]

human genome, with 22 homologous chromosomes, both the female (XX) and male (XY) versions of the [sex chromosome](#) (bottom right), as well as the [mitochondrial genome](#) (to scale at bottom left). The blue scale to the left of each chromosome pair (and the mitochondrial genome) shows its length in terms of millions of DNA base pairs.

Further information: [Karyotype](#)

Several scientific teams worked in the 1970s and 1980s to identify genes and their loci as a part of the search for the gene of [cystic fibrosis](#). Progress was modest until 1985, when [Lap-Chee Tsui](#) and colleagues at Toronto's Hospital for Sick Children identified the locus for the gene.^[18] It was then determined that a shortcut was needed to speed the process of identification, so Tsui contacted Collins, who agreed to collaborate with the Toronto team and share his chromosome-jumping technique. The gene was identified in June 1989,^{[19][20]} and the results were published in the journal [Science](#) on September 8, 1989.^[21] This identification was followed by other genetic discoveries made by Collins and a variety of collaborators. They included isolation of the genes for [Huntington's disease](#),^[22] [neurofibromatosis](#),^{[23][24]} [multiple endocrine neoplasia type 1](#),^[25] [inv\(16\) AML](#)^[26] and [Hutchinson–Gilford progeria syndrome](#).^[27]

	National Institutes of Health
Thesis	Semiclassical theory of vibrationally inelastic scattering with application to $H^+ + H_2$ ⁽¹⁹⁷⁴⁾
Doctoral advisor	James Cross

Genomics [\[edit \]](#)

In 1993 National Institutes of Health Director [Bernadine Healy](#) appointed Collins to succeed [James D. Watson](#) as director of the [National Center for Human Genome Research](#), which became [National Human Genome Research Institute](#) (NHGRI) in 1997. [As director he oversaw the International Human Genome Sequencing Consortium](#) ^[28] [which was the group that successfully carried out the Human Genome Project](#) ^[29]

In 1994 Collins founded NHGRI's Division of Intramural Research,^[30] a collection of investigator-directed laboratories that conduct genome research on the NIH campus.^[citation needed]

In June 2000 Collins was joined by President Bill Clinton and biologist [Craig Venter](#) in making the announcement of a working draft of the [human genome](#).^[31] He stated that "It is humbling for me, and awe-inspiring to realize that we have caught the first glimpse of our own instruction book, previously known only to God."^{[32][33][34]} An initial analysis was published in February 2001, and scientists worked toward finishing the reference version of the human genome sequence by 2003, coinciding with the 50th anniversary of [James D. Watson](#) and [Francis Crick](#)'s publication of the structure of [DNA](#).^[citation needed]

Another major activity at NHGRI during his tenure as director was the creation of the [haplotype map](#) of the human genome. This [International HapMap Project](#) produced a catalog of human genetic variations—called [single-nucleotide polymorphisms](#)—which is now being used to discover variants correlated with disease risk. Among the labs engaged in that effort is Collins' own lab at NHGRI, which has sought to identify and understand the genetic variations that influence the risk of developing [type 2 diabetes](#).^[citation needed]

In addition to his basic genetic research and scientific leadership, Collins is known for his close attention to ethical and legal issues in genetics. He has been a strong advocate for protecting the privacy of genetic information and has served as a national leader in securing the passage of the federal Genetic Information and Nondiscrimination Act, which prohibits gene-based discrimination in employment and health insurance.^[35] In 2013, spurred by concerns over the publication of the genome of the widely used [HeLa](#) cell line derived from the late [Henrietta Lacks](#), Collins and other NIH leaders worked with the Lacks family to reach an agreement to protect their privacy, while giving researchers controlled access to the genomic data.^[36]

Building on his own experiences as a physician volunteer in a rural missionary hospital in [Nigeria](#),^[37] Collins is also very interested in



Human Genome Project

🌐 49 languages ▾

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From Wikipedia, the free encyclopedia

The **Human Genome Project (HGP)** was an international [scientific research](#) project with the goal of determining the [base pairs](#) that make up human [DNA](#), and of identifying, [mapping](#) and [sequencing](#) all of the [genes](#) of the [human genome](#) from both a physical and a functional standpoint. It started in 1990 and was completed in 2003.^[1] It remains the world's largest collaborative biological project.^[2] Planning for the project started after it was adopted in 1984 by the [US government](#), and it officially launched in 1990. It was declared complete on April 14, 2003, and included about 92% of the genome.^[3] Level "complete genome" was achieved in May 2021, with a remaining only 0.3% bases covered by potential issues.^{[4][5]} The final gapless assembly was finished in January 2022.^[6]

Funding came from the United States government through the [National Institutes of Health](#) (NIH) as well as numerous other groups from around the world. A parallel project was conducted outside the government by the [Celera Corporation](#), or Celera Genomics, which was formally launched in 1998. Most of the government-sponsored sequencing was performed in twenty universities and research centres in the [United States](#), the [United Kingdom](#), [Japan](#), [France](#), [Germany](#), and [China](#),^[7] working in the International Human Genome Sequencing Consortium (IHGSC).

The Human Genome Project originally aimed to map the complete set of [nucleotides](#) contained in a human [haploid reference genome](#), of which there are more than three billion. The "genome" of any given individual is unique; mapping the "human genome" involved sequencing samples collected from a small number of individuals



Logo of the Human Genome Project

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The Free Encyclopedia

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Myriad Genetics

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From Wikipedia, the free encyclopedia

Myriad Genetics, Inc.

Myriad genetics

Type

Public

Traded as

Nasdaq: MYGN [↗]
S&P 600 Component

Industry

Healthcare
Molecular Diagnostics
Biotechnology
Precision Medicine

Founded

Salt Lake City, Utah,
United States (1991)

Headquarters

Salt Lake City, Utah

Key people

Paul J. Diaz, President and
CEO
Mark Skolnick, Co-
Founder
Peter Meldrum, Co-
Founder
Kevin Kimberlin, Co-
Founder
Jerry Lanchbury, CSO
Walter Gilbert, Director and
Vice Chair

Revenue

▲ \$690.6 Million(2021)^[1]

Number of employees

2,600^[2]

Website

www.mvriad.com [↗]

Myriad Genetics, Inc. is an American genetic testing and [precision medicine](#) company based in [Salt Lake City, Utah](#), United States. Myriad employs a number of proprietary technologies that permit doctors and patients to understand the genetic basis of human disease and the role that [genes](#) play in the onset, progression and treatment of disease. This information is used to guide the development of new products that assess an individual's risk for developing disease later in life (predictive medicine), identify a patient's likelihood of responding to a particular drug therapy (precision medicine), assess a patient's risk of disease progression and disease recurrence ([precision medicine](#)), and measure disease activity.

History

[edit]

The global search for the genetic basis of breast cancer began when [Mary-Claire King](#), Ph.D., from the [University of California, Berkeley](#) announced the localization through [linkage analysis](#) of a gene associated with increased risk for breast cancer ([BRCA1](#)) to the long arm of chromosome 17.^[3]

To further locate the actual gene, Dr. Skolnick and his colleagues invented a gene mapping technique known as [Restriction Fragment-length Polymorphisms](#) (RFLP).^[4] Gilbert joined Kimberlin in 1991, and they teamed up with Skolnick to form Myriad Genetics.^[5]

In August 1994, Mark Skolnick and researchers at Myriad, along with colleagues at the [University of Utah](#), the U.S. National Institutes of Health (NIH), and McGill University sequenced [BRCA1](#).^[6] They attempted to patent this gene, which resulted in significant controversy and a landmark Supreme Court Case.^{[7][8][9]}

The firm then established the first clinical laboratory to commercialize genomic testing.^{[10][11]} Myriad created the first test to measure the molecular biology and aggressiveness of men's prostate cancer,^[12] devised a method to assess the inherited breast cancer risk of any

12 📖 This is a developing story worth looking into. Til then, receipts as always 

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